Hazardous Waste that is Used or Reused

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Are you thinking about using your hazardous waste as an ingredient in a production process, a substitute for a product, or a feedstock substitute in the process that generated it? Then you should know that if the material is legitimately used, it may be exempt from hazardous waste regulation, under s. NR 605.05(2)(g), Wis. Adm. Code.

Note: This factsheet addresses the conditional hazardous waste exemption for materials that are used or reused as an ingredient, a commercial product or feedstock substitute, per s. NR 605.05(2)(g), Wis. Adm. Code. For other hazardous waste exemptions that may apply, see s. NR 605.05, Wis. Adm. Code.

Recycling waste by reusing it may save money and lessen environmental impacts by reducing the amount of waste disposed of and virgin materials required. However, because the materials are hazardous, they need to be managed in ways that protect human health and the environment.

Persons generating waste are required to determine if the waste is regulated as hazardous waste. The Department does not make these waste determinations for generators. This fact sheet is intended to help you to determine if a waste that is used or reused is conditionally exempt from hazardous waste regulation.

Definitions

Recycling, as defined in s. NR 600.03(186), Wis. Adm. Code, means the beneficial use, reuse or

legitimate recovery or reclamation of hazardous waste, and includes the recovery of energy from hazardous waste.

Reclaimed, as defined in s. NR 605.03(1), Wis. Adm. Code, means to process a material to recover a usable product or to regenerate a material.

Used or reused, as defined in s. NR 605.03(2), Wis. Adm. Code, means to employ a material as an ingredient, including use as an intermediate in an industrial process to make a product, or to employ a material in a particular function or application as an effective substitute for a commercial product.

Determine if the Hazardous Waste is Conditionally Exempt from Regulation

Section NR 605.05(2)(g), Wis. Adm. Code, conditionally exempts the following materials from hazardous waste regulation that are recycled by being:

- Used or reused as ingredients in an industrial process to make a product without being reclaimed:
- Used or reused as effective substitutes for commercial products; or,
- Returned to the original process from which they are generated as a substitute for feedstock materials, without first being reclaimed or disposed of on the land.



The exemption does not apply to:

- Materials used in a manner constituting disposal or used to produce products that are applied to the land;
- Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or,
- Materials that are speculatively accumulated. A material is not speculatively accumulated if it can be shown that there is a feasible way to recycle the material and at least 75% of the material, by volume or weight, is recycled or transferred to another site for recycling in a calendar year. Speculative accumulation is defined in s. NR 600.03(211), Wis. Adm. Code.

Determine if the Recycling Process is Legitimate

Whether the waste is being recycled on-site or offsite, the generator is responsible for evaluating the recycling process to assure it is legitimate rather than hazardous waste storage, treatment or disposal subject to licensing.

All of the following criteria should be considered to determine if a material is a commodity rather than a waste:

- The material should be managed as a valuable commodity from the point of generation at your facility until it is used in the recycling process.
 - Is the material handled in a manner similar to that of an analogous raw material?
 - If there is no analogous raw material, is the material managed in a way to minimize the potential for releases to the environment?
- The material should provide a useful

contribution to the recycling process or to a product of the recycling process. The evaluation should consider the economics of the recycling transaction.

- Is the amount of material substituted into the process similar to the quantity of virgin product that would otherwise be used? Substitution of larger quantities may indicate that the waste has little value.
- Can the material be used without mixing it with a second ingredient in an attempt to disguise or dilute the material's properties?
- The recycling process should yield a valuable product or intermediate that is either sold to a third party or used by the recycler or generator as an effective substitute for a commercial product or as a useful ingredient in an industrial process.
 - Can the recycler show that the product meets applicable product specifications or industry standards?
- The <u>product</u> of the recycling process should not contain significantly elevated levels of any hazardous constituents that are not found in analogous products and should not exhibit a hazardous characteristic that the analogous product does not exhibit.
 - Can the recycler demonstrate that unacceptable amounts of toxic constituents are not passing through to the products? For example, the recycling process would not be legitimate if cadmium is not normally in the end product, but now it is present because of the use of cadmium contaminated materials.
 - If the product normally contains toxic constituents, does the substitution of waste material in the process result in a non-significant increase the amount of toxic constituents in the product?

Although "significant increase" has not been defined,



the use of the end product should help determine if the increase of the toxic constituents is significant. The potential health or environmental impact that might result due to the substitution of the materials should be considered when determining if there is a significant increase in the concentration of toxic constituents.

Note: The above criteria are based on EPA's proposed changes to the definition of solid waste, published in an October 28, 2003, Federal Register Notice available on the Internet at

www.epa.gov/epaoswer/hazwaste/dsw/abr-rule/abr-rule.pdf

Document Your Determination of Legitimate Recycling

The generator should maintain records that support the decision that the process is legitimate recycling. The records should address the legitimacy criteria outlined above. In addition, the Department, as stated in s. NR 605.05(3), Wis. Adm. Code, may request the following information:

- the name, location and address of the recycling facility;
- a description of the waste, hazardous waste number and waste quantity;
- a detailed description of the recycling process and how the waste is used as an ingredient;
- a demonstration that there is a market or disposition of the waste; and
- documentation that the recycling facility has the necessary equipment to conduct the recycling activity.

If hazardous waste is discarded through a process that is not legitimate recycling, the generator and all others who have handled or managed the material may be subject to enforcement for violating hazardous waste management requirements. For this reason, the Department recommends reviewing a recycling facility's compliance history prior to sending them waste. The state or local environmental agency for the state in which the recycling facility is located may be able to provide you with inspection and compliance information. The recycling facility should be able to provide you with the names and telephone numbers of hazardous waste regulators familiar with their operations.

For More Information

To read about all administrative codes pertaining to hazardous waste in Wisconsin (including groundwater quality, household hazardous waste, and mercury, among many others), see:

www.dnr.wi.gov/org/aw/wm/information/wiacssh.h
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To read other related publications on Wisconsin hazardous waste regulations:

- Hazardous Waste Recycling: DNR Requirements in Brief
 - www.dnr.wi.gov/org/aw/wm/publications/hazard/w a 191.pdf
- Hazardous Waste Determination: Guide Through NR 605, Wis. Adm. Code
 - www.dnr.wi.gov/org/aw/wm/publications/hazard/wa_204.pdf

To read about Wisconsin's hazardous waste rules regarding identification and listing of hazardous waste (ch. NR 605, Wis. Adm. Code), see:

www.legis.state.wi.us/rsb/code/nr/nr605.pdf

For a complete list of the Department's hazardous waste publications, see:

www.dnr.wi.gov/org/aw/wm/publications/



To read about Wisconsin's hazardous waste regulatory program, including a list of local contacts, see:

www.dnr.wi.gov/org/aw/wm/hazard/

For a link to Wisconsin government, including laws, legislation, and announcements, see:

www.wisconsin.gov/state/home/

How to Reach Us

For additional information on waste management requirements and recycling options, contact the waste management staff at these DNR regional offices:

- Northeast Region, Green Bay, 920/492-5800
- Northern Region, Spooner, 715/635-2101
- South Central Region, Fitchburg, 608/275-3266
- Southeast Region, Milwaukee, 414/263-8500
- West Central Region, Eau Claire, 715/839-3700

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information.

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